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35271
S/196/62/000/006/005/018
E194/E154

9.2110 (1001, 1153, 1385)

AUTHORS: Kuchinskiy, G.S., and Irkayeva, K.M.

TITLE: The inductance of capacitors made of rolled foil

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.6, 1962, 8, abstract 6 B41. (Vestn. elektroprom-sti, no.11, 1961, 38-41)

TEXT: Capacitors used to produce high impulse currents with high frequency oscillations on discharge must have minimum inductance. For a capacitance of 0.1 microfarads the inductance should be equal to or less than 0.03 microhenries to ensure a discharge frequency of 3 Mc/s. The capacitor inductance depends on the inductance of the foil, the internal connections and the external terminals. For foils with integral terminals the foil inductance is

$$L_1 = \frac{\mu_o l}{3b} (2d + 3a)$$

where: a is the distance between interleaved insulating spacers; b, d and l are respectively the width, thickness and length of

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the spacers. If the terminals are displaced, L_1 is increased by an amount that depends on the location of the terminals. The inductance of internal connections calculated for a single terminal in the form of a flat foil when the terminals are displaced by up to a section width is:

$$L_2 = \frac{\mu_o \ell}{2\pi} \left(\ln \frac{2\ell}{b} + \frac{1}{2} \right)$$

where b and ℓ are respectively the width and the length of the terminals. Various other constructions and terminal arrangements are considered and curves of inductance are given. It is shown that 'inductionless winding' (with projecting foils) may, with a large number of foils connected in series, give greater inductance than ordinary windings with terminals brought out to one end. Increasing the number of terminals does not reduce L_1 much. The limiting resonance frequency of a capacitor is inversely proportional to the cross-section of the foils and does not depend on the foil width. The wave

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The inductance of capacitors ... S/196/62/000/006/005/018
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resistance is inversely proportional to the foil width and does not depend on the cross-sectional area. To increase the area of the foil its width should be increased.
2 literature references.

[Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IBRASHEV, Kh.; IRKEGULOV, Sh.

Compiling dictionaries of mathematical terms in the Kazakh language. Vest.Kazakh.SSR 16 no.9:57-61 S '60. (MIRA 13:9)
(Mathematics--Dictionaries--Kazakh)

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHEN, A.

IRKHEN, A. "On the diseases of Cotoin (Coto Tree?)," Za Novoe Volokno, no.3, 1933, pp.1-6. 73.8 Z12

So: SIRA SI-90-53, 15 Dec. 1951

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

16.3800

S/044/62/000/011/023/064
A060/A000

AUTHOR: Irkegulov, Sh.T.

TITLE: On the general boundary problem for a harmonic function in a multiply-connected region

PERIODICAL: Referativnyy zhurnal, Matematika, no. 11, 1962, 57 - 58, abstract 11B229 (Tr. Mekhan.-matem. fak. Kazakhsk. un-t, 1960, v. 1, no. 2, 94 - 103)

TEXT: Let T be a (p + 1) times connected region bounded by simple nonintersecting curves with continuous curvature $L_0, L_1, \ldots, L_m$, of which L_0 contains the remaining ones, and $\Gamma_1, \ldots, \Gamma_l$ smooth simple nonintersecting closed curves lying entirely within T, and let T^* be the region remaining after excluding the curves Γ_α from T. The following boundary problem is considered. To find a function $U(x, y)$ harmonic in T^* and continuous in $\bar{T}$ which satisfies the boundary conditions

$$\frac{\partial U}{\partial u_i} = \frac{\partial U}{\partial n_e} H_\alpha(s) + f_\alpha(s) \quad \text{on} \quad \Gamma_\alpha, \quad \alpha = 1, 2, \ldots, l,$$

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On the general boundary problem for a ....

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$$\sum\sum a_{kJ}^{(q)}(s)\frac{\partial^k U}{\partial x^k - i\partial y^i} = F_q(s) \quad \text{on} \quad L_q, \quad q = 0, 1, 2, \ldots, p .$$

Similar problems of a somewhat more special form had been analyzed by D.I. Sherman (Izv. AN SSSR.Ser. matem., 1946, v.10, no. 2) and Ye.I. Kim (Prikl. matem. i mekhan., 1952, v. 16, no. 2). By using an integral representation of the requisite function similar to those employed in the above-mentioned papers, the author reduces the boundary problem to an integral equation. Fredholm's theorems make it possible to formulate certain conclusions as to the existence of a solution and the number of linearly independent solutions of the problem under consideration.

F.D. Gakhov

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A., kand. tekhn. nauk

Methods of calculating the estimated cost of loading and unloading operations. Rech. transp. 22 no.8:18-20 Ag '63. (MIRA 16:10)

(Loading and unloading)

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

MIRONOV, V., doktor tekhn.nauk; IRKHIN, A., kand.tekhn.nauk

Improving the system of operative indices of the work of the fleet.
Rech. transp. 24 no.4:8-9 '65. (MIRA 18:5)

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

ACC NR: AP6017551 (N) SOURCE CODE: UR/0310/66/000/001/0008/0010

AUTHOR: Irkhin, A. (Candidate of technical sciences); Murav'yev, A. (Candidate of economics)

ORG: [Murav'yev] LIVT

22
21
B

TITLE: Operation of diesel cargo ships with attached barges

SOURCE: Rechnoy transport, no. 1, 1966, 8-10

TOPIC TAGS: marine engineering, diesel engine, inland waterway transportation, CARGO SHIP, SERVICE CRAFT

ABSTRACT: The economics of using special combined ship-and-barge units for inland waterway transportation are discussed. The unit consists of a diesel cargo ship and a freight barge. The barge stern is lashed to the ship's bow. After a general discussion, the authors present their estimates and conclusions. According to their estimates, a 50-pct increase in power capacity of main diesel engines is expedient for a more efficient operation of the combined ship-and-barge unit. It is suggested that this increase can be obtained by providing turbosupercharging air to the existing engine. It is estimated that the increase in power from about 800 to 1200 hp will assure an increase of 15% in speed and of 9% in productivity while the cost in transportation will be only 1.7%. Under these conditions, the transportation of goods by the combined unit will be 22% less expensive than the delivery in a cargo ship without an attached barge. In addition, it is

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ACC NR: AP6017551

easier to push and manipulate the loaded barge from the cargo ship equipped with diesels of a higher power capacity. The effect of the screw pitch on the speed of the combined two-vessel unit is also stressed by the authors. According to the tests conducted by GIIVT the speed of the diesel ship "Ovruch" with an attached barge is estimated 14% higher for a properly adjusted pitch than for the old types of screw. It is also estimated that such an increase in speed will produce a 6-pct reduction in transportation turnover time.

SUB CODE: 13, 21/ SUBM DATE: None

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.F., inzh.; TOMILOV, I.A., inzh.

New mechanical system for cleaning large pipes. Elek. sta. 34 no.5:82-83 My '63. (MIRA 16:7)

(Pipe—Cleaning)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A. P.

Osnovnye printsipy pravil tekhnicheskoi eksploatatsii vnutrennikh vodnykh putei SSSR. / Basic principles of rules for technical exploitation of inland waterways of the U. S. S. R. / (Vodnyi transport, 1937, no. 2, p. 13-14). DLC: HE561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A. P. and SOLOV'EV, L.

Posobie k primeneniiu grafika dvizheniia sudov i tekunicheskogo plana raboty flota. /_ Manual for utiligation of time schedule for vessel movement and the technical plan for fleet operation_/. Moskva, Rechizdat, 1944. 176 p. illus.

SO: Soviet Transportation and Communications. A Bibliography. Library of Congress, Reference Department, Washington, 1952, Unclassified. One of [illegible]

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A. P.

Usloviia effektivnoi organizatsii dvizheniia samokhodnogo gruzovogo flota. [Conditions for efficient organization of freighter fleet movement] (Rechnoi transport, 1949, no. 3. p. 14-17.)

DLC: TC601.R4

SO: Soviet Transportation and Communications, A. Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P.

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2737. Irkhin, A. P., and Nepbenek, E. Ia. Attitude when in motion and velocity characteristic of freight motor vessels of the "Great Volga" type (in Russian), *Rech. Transport* no. 3, 15–19, 1955; *Ref. Zh. Mekh.* 1956, Rev. no. 7861.

Results are described of the systematized model and natural tests of a freight motor vessel of the type "Great Volga" for the determination of its resistance to movement and of the value of its attitude when in motion in shallow water and in a canal. The model tests were made in the small TSNIIRF reservoir, and the natural tests in different reaches of the Volga and in the "Moscow" canal. The object of the tests was to determine the depth which can be safely navigated and the reserves of water under the bottom during the movement of vessels of this type under full power of the main engines.

On the basis of the analysis of the tests, authors conclude that the determination of the attitude of the vessel in the conditions described above, starting merely from the value of the reduction of the level of the free surface of water at the sides of the moving vessel, as was suggested by the Hydraulics Section of the Academy of Sciences, [illegible] by the test and disputes the existence of the phenomenon.

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P., dotsent, kand.tekhn.nauk

Basis for the over-all justification methods of motorboat freight capacity and propulsive speed as well as the rapidity of cargo handling. Trudy LIIVT. Vop. ekon. i org. vod. transp. no.2:38-53 '59. (MIRA 13:11)

(Inland water transportation--Costs)
(Cargo handling--Costs)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P., kand.tekhn.nauk

General basis for determining capacity and speed of cargo motorships. Rech.transp. 18 no.1:5-9 Ja '59. (MIRA 12:2)
(Motorships)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P., kand.tekhn.nauk

Economic efficiency of diesel-propelled freighters for mixed river and sea transportation of loose-bulk cargo. Rech.transp. 18 no.12:10-11 D '59. (MIRA 13:4)
(Freighters) (Shipping--Accounting)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

POVOROZHENKO, Vladimir Vasil'yevich, prof., doktor tekhn.nauk; KOSTENKO, Ivan Georgiyevich, kand.tekhn.nauk; MAKHOTKIN, Nikolay Aleksandrovich, inzh.; KUMYANTSEV, Sergey Mikhaylovich, inzh.; PARAKHONSKIY, Boris Mikhaylovich, kand.ekon. nauk; SOLOV'IEV, Ivan Fomich, kand.tekhn.nauk; BAKAYEV, V.G., doktor tekhn.nauk, red.; CHERNOMORDIK, G.I., doktor tekhn.nauk, nauchnyy red.; IRKHIN, A.P., kand.tekhn.nauk, nauchnyy red.; KUDRYAVTSEV, A.S., doktor ekon.nauk, nauchnyy red.; GLADTSINOV, B.N., kand.tekhn.nauk, nauchnyy red.; BYGEL', I.Yu., red.; LAVRENOVA, N.B., tekhn.red.

[Transportation in the U.S.S.R.] Transport SSSR. Pod obshchei red. V.G.Bakaeva. Moskva, Izd-vo "Morskoi transport," 1960. 536 p. (MIRA 13:7)

(Transportation)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, Aleksandr Petrovich, kand.tekhn.nauk; YERPICHEV, Mikhail Ivanovich, inzh.; TSYPIN, Yakov Yevgen'yevich, inzh.; TIKHOMIROVA, Ye.N., red.; VOLCHOK, K.M., tekhn.red.

[Economic aspects and the organization of transportation by the self-propelled freighter fleet] Ekonomika i organizatsiia perevozok samokhodnym gruzovym flotom. Leningrad, Izd-vo "Rechnoi transport," Leningr.otd-nie, 1960. 94 p. (MIRA 13:9)
(Inland water transportation)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

SMIRNOV, Boris Mikhaylovich [deceased]; KOLOMOYTSEV, V.P., kand. tekhn. nauk, retsenzent; GORDON, L.A., kand. tekhn. nauk, retsenzent; IRKHIN, A.P., nauchnyy red.; KAZAROV, Yu.S., red.; TSAL, R.K., tekhn. red.

[Economic analysis in the design of seagoing vessels] Ekonomicheskii analiz pri proektirovanii morskikh sudov. Leningrad, Gos. soiuznoe izd-vo sudostroit. promyshl., 1960. 375 p. (MIRA 14:7)

(Naval architecture) (Shipping--Accounting)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P., kand.tekhn.nauk, dotsent

Methodical basis and results of investigating the efficient correlation between the traffic capacity of harbors and the carrying capacity of the fleet. Trudy LIVT no.16:17-35 '61. (MIRA 14:9)

(Inland water transportation)
(Harbors)

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"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A., kand.tekhn.nauk

Systematic development of the fleet and harbors is the basis for the high efficiency of river transportation. Rech. transp. 21 no.3:10-12 Mr '62. (MIRA 15:4)
(Ships) (Harbors)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

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IRKHIN, A., kand.tekhn.nauk; MURAV'YEV, A., inzh.; ZIN', E., inzh.

Experience in the operation of the "Volgo-Don"-type cargo motorships. Rech.transp. 21 no.11:13-14 N '62. (MIRA 15:11)
(Inland water transportation) (Merchant ships--Cargo)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

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IRKHIN, Aleksandr Petrovich, kand. tekhn.nauk; YERPICHEV, Mikhail Ivanovich, inzh.; TSYPIN, Yakov Yevgen'yevich, inzh.; CHERNYY, N.Ye., red.; VOLCHOK, K.M., tekhn. red.

[The economics and organization of transportation via a self-propelled merchant marine fleet] Ekonomika i organizatsiia perevozok samokhodnym gruzovym flotom. Izd.2., ispr. i dop. Moskva, Izd-vo "Rechnoi transport" 1963. 114 p. (MIRA 16:10)

(Inland water transportation)

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873(

"APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00051873

IRKHIN, A.P., kand. tekhn. nauk, dotsent

Analysis of formulas used in determining the time spent by ships waiting for cargo service. Trudy LIVT no.57:16-22 '64. (MIRA 18:11)

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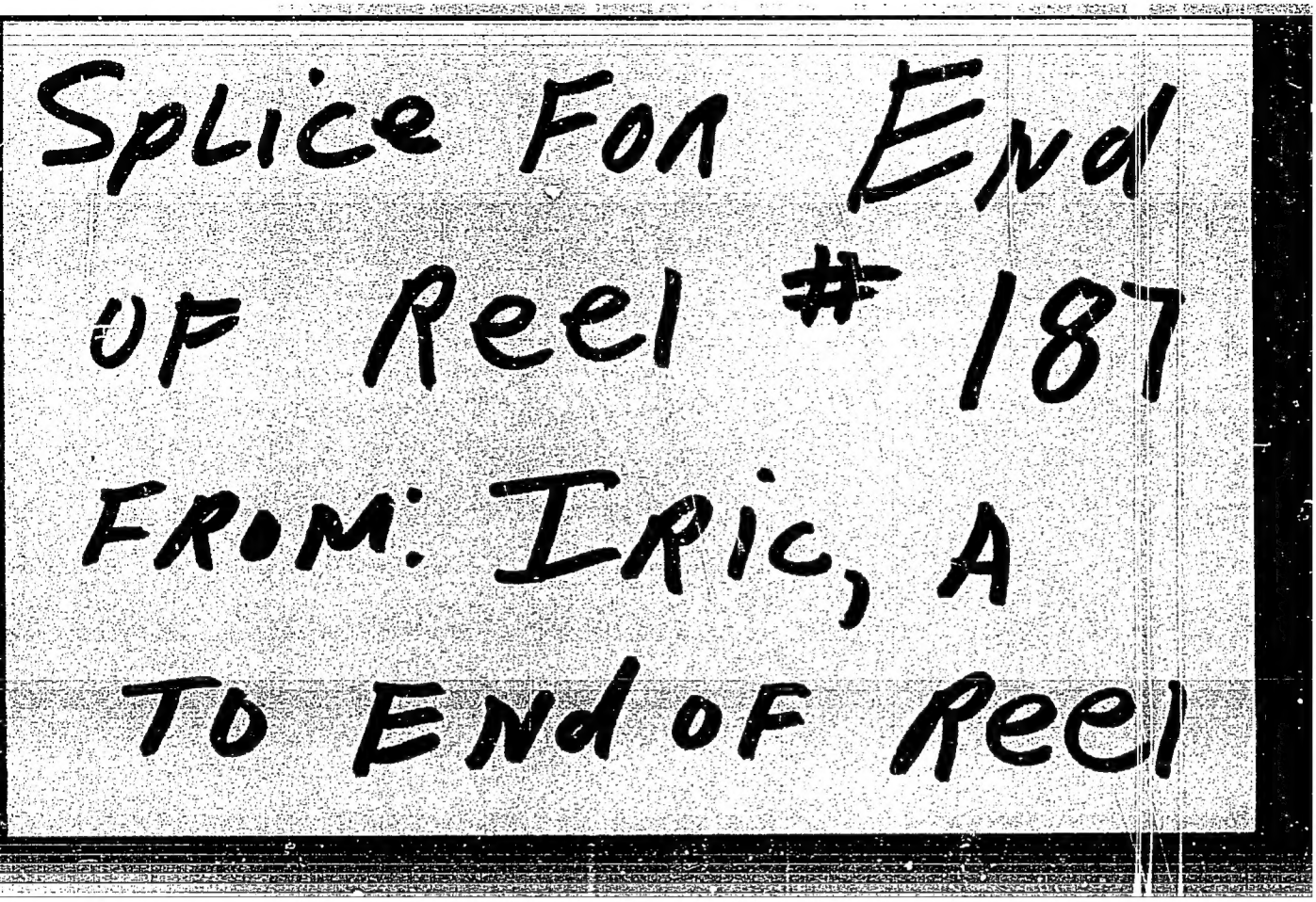

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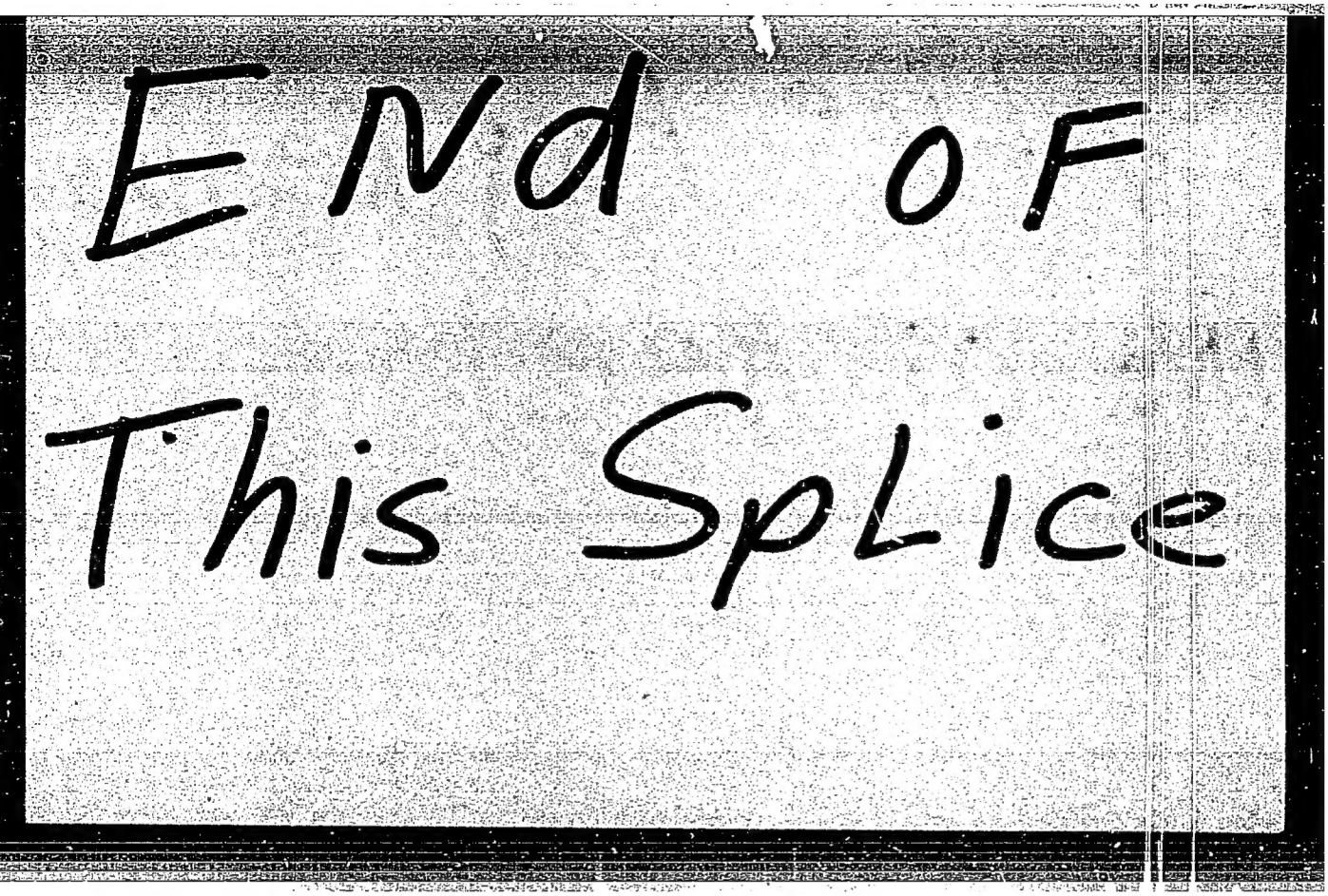

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